

Coding with ICD-O-3

Texas Cancer Registry

Objectives

By the end of this training, you should be able to discuss:

- Sections of ICD-O-3 Book
- Meaning of NOS/OBS
- Format of Numerical & Alphabetic Index
- Rules
- Morphology
- Topography
- Resources
- ICD-O-3 Updates

*disclaimer: All the information valid as of 12/2019 and any revisions by national standard setters may change the validity of the information

ICD-O-3 Update Guidelines

- 114 new terms added to existing codes for cases diagnosed on or after 1/1/2018
 - 85 malignant (/3)
 - 12 in situ (/2)
 - 3 benign or borderline of CNS (/0 and /1)
- Please visit NAACCR's website for the “*2018 Guidelines for ICD-0-3 Histology Code and Behavior Update Implementation*”

<https://www.naaccr.org/implementation-guidelines/#ICDO3>

ICD-O-3 Codes Alpha Order

Effective January 1, 2018
ICD-O-3 codes, behaviors and terms are site-specific
Alpha Order
Last updated 8/22/18

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
New Term	8551/3	Acinar adenocarcinoma (C34. _)	Y	Lung primaries diagnosed prior to 1/1/2018 use code 8550/3 For prostate (all years) see 8140/3
New Term	8140/3	Acinar adenocarcinoma (C61.9 ONLY)	Y	For prostate only, do not use 8550/3
New Term	8572/3	Acinar adenocarcinoma, sarcomatoid (C61.9)	Y	
New Term	8550/3	Acinar cell carcinoma	Y	Excludes C61.9- see 8140/3
New Term	8316/3	Acquired cystic disease-associated renal cell carcinoma (RCC) (C64.9)	Y	
New code/term	8158/1	ACTH-producing tumor	N	
New Term	8574/3	Adenocarcinoma admixed with neuroendocrine carcinoma (C53. _)	Y	
Behavior Code/term	8253/2	Adenocarcinoma in situ, mucinous (C34. _)	Y	Important note: lung primaries ONLY: For cases diagnosed 1/1/2018 forward do not use code 8480 (mucinous adenocarcinoma) for in-situ adenocarcinoma, mucinous or invasive mucinous adenocarcinoma.

Histology Coding Sources

Histology Coding Sources:

1. 2018 Solid Tumor Rules
2. Updated ICD-O histology codes and terms
<https://seer.cancer.gov/icd-o-3/>
3. ICD-O manual, Third Ed, First Revision
4. Ask a SEER Registrar
<https://seer.cancer.gov/registrars/contact.html>

Histology

Histology can only be coded after you determine whether you have a single or multiple primaries

- Refer to 2018 Solid Tumor Rules to determine the number of primaries for solid tumors
https://seer.cancer.gov/tools/solidtumor/STM_2018.pdf
- For hematopoietic & lymphoid diseases, refer to the Hematopoietic & Lymphoid Database
<http://www.seer.cancer.gov/seertools/hemelymph>

Primary Site Resources

- 2018 Solid Tumor Rules
 - Primary Site
 - Histology
 - Number of primaries to abstract
 - <https://seer.cancer.gov/tools/solidtumor/>
- ICD-03 manual, Third Edition, First Revision
 - Primary Site
 - Histology

Primary Site

2018 Solid Tumor Rules

- Site Codes
 - Breast
 - Lung
 - Brain
 - Bladder

Primary Site

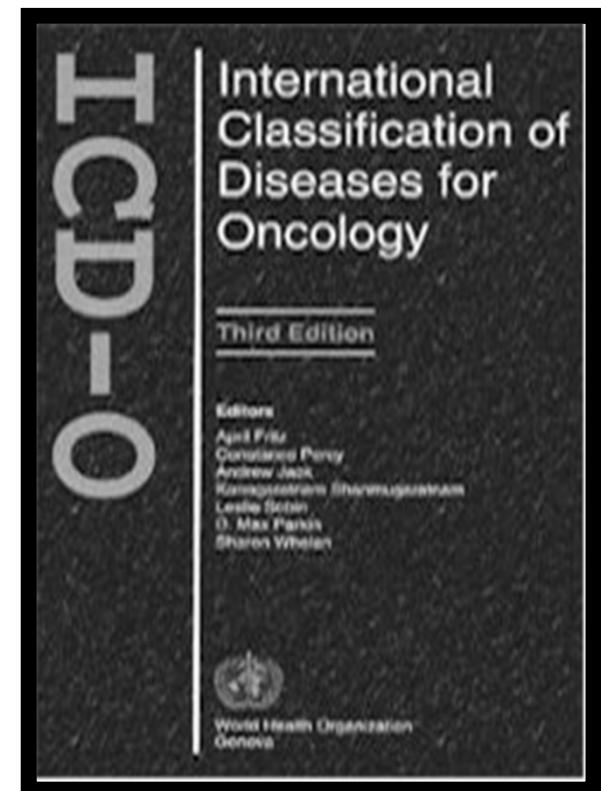
2018 Solid Tumor Rules

Breast Equivalent Terms and Definitions
 C500-C506, C508-C509
 (Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

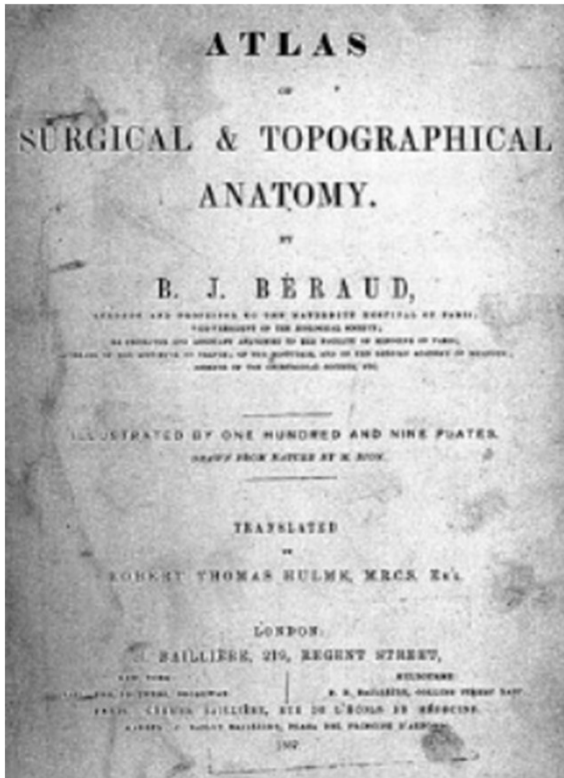
Terms and Descriptive Language	Site Term and Code
Areolar Nipple Paget disease <u>without</u> underlying tumor <i>Note:</i> Paget with underlying tumor is coded to the quadrant of breast in which the underlying tumor is located	Nipple C500
Above nipple Area extending 1 cm around areolar complex Behind the nipple Below the nipple Beneath the nipple Central portion of breast Cephalad to nipple Infra-areolar Lower central Next to areola NOS Next to nipple Retroareolar Subareolar Under the nipple Underneath the nipple	Central portion of breast C501
Superior inner Superior medial Upper inner quadrant (UIQ) Upper medial	Upper inner quadrant of breast C502

ICD-O-3 Manual

- Introduction & Instructions: 1-42
- Numerical Index:
 - Topography (Site): 43-65
 - Morphology (Type): 66-104
- Alphabetical Index: 105-218
 - Topography
 - Morphology



Topography

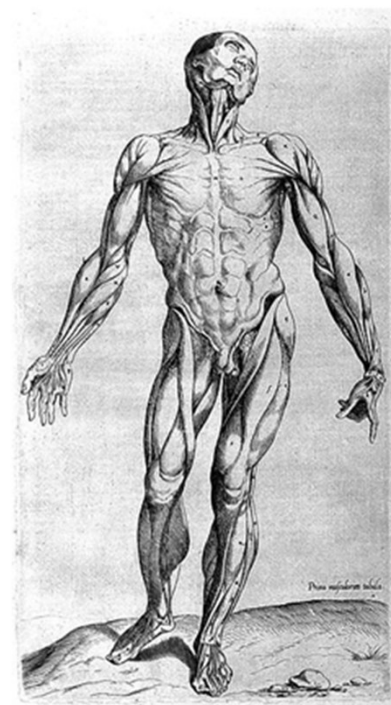


- In cancer registry, topography is the anatomical description of any part of the body. Specifically, it refers to the primary site of the cancer.
- Topographic anatomy is the branch of anatomy dealing with regions of the body especially with reference to diagnosis and treatment of disease or injury.

Order of ICD-O-3 Topography Codes

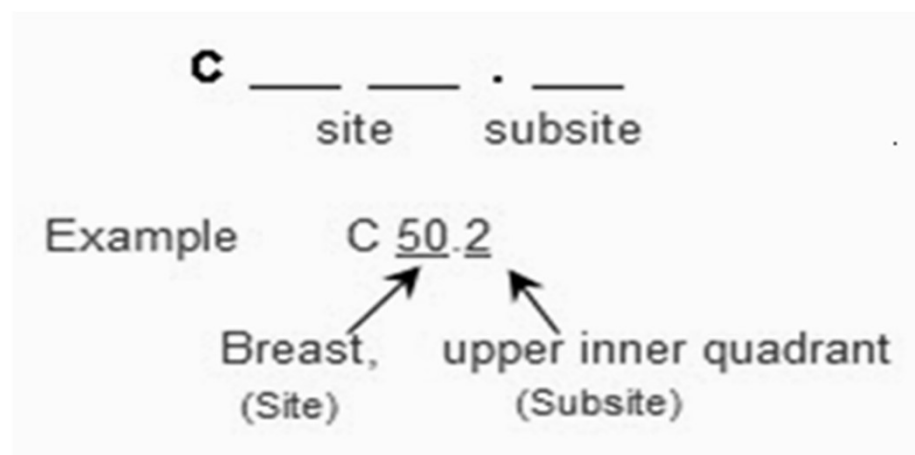
Topography refers to site of origin (the primary site). It tells us where the neoplasm started.

- C00 – C14 -- Lip, Oral Cavity & Pharynx
- C15 – C26 -- Digestive Organs
- C30 – C39 -- Respiratory System & Intrathoracic Organs
- C40 – C41 -- Bones, Joints & Articular Cartilage
- C42 -- Hematopoietic & Reticuloendothelial Systems
- C44 -- Skin
- C47 -- Peripheral Nerves & Autonomic Nervous System
- C48 -- Retroperitoneum & Peritoneum



Structure of ICD-O-3 Topography Codes

- Topography codes always begin with 'C'
- The first two numerals indicate the primary site
- The last number indicates the sub site



ICD-O-3 Topography Codes in Web Plus

Web Plus

Enter new abstract

All data items marked with an asterisk (*) are required.

CANCER INFORMATION

Tobacco Use ICD-O-3

Date of Initial Diagnosis *

Age at Diagnosis

ICDO 2 Morph B/4 2001

ICDO 2 Behavior B/4 2001

ICDO 3 Morph After 2001 *

ICDO 3 Beh After 2001 *

Primary Site

Grade Clinical

Grade Pathologic

Laterality

Final Diagnosis (Morph, Behavior, Grade)

Final Diagnosis (Primary Site, Laterality)

Lymphovascular Invasion

Diagnostic Confirmation

STAGE PROGNOSTIC FACTORS TEXT

Summary Stage Documentation *

Summary Stage Documentation - PE

Summary Stage Documentation - Xray/Scan

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Primary Site codes from ICD-O-3 Topography Section

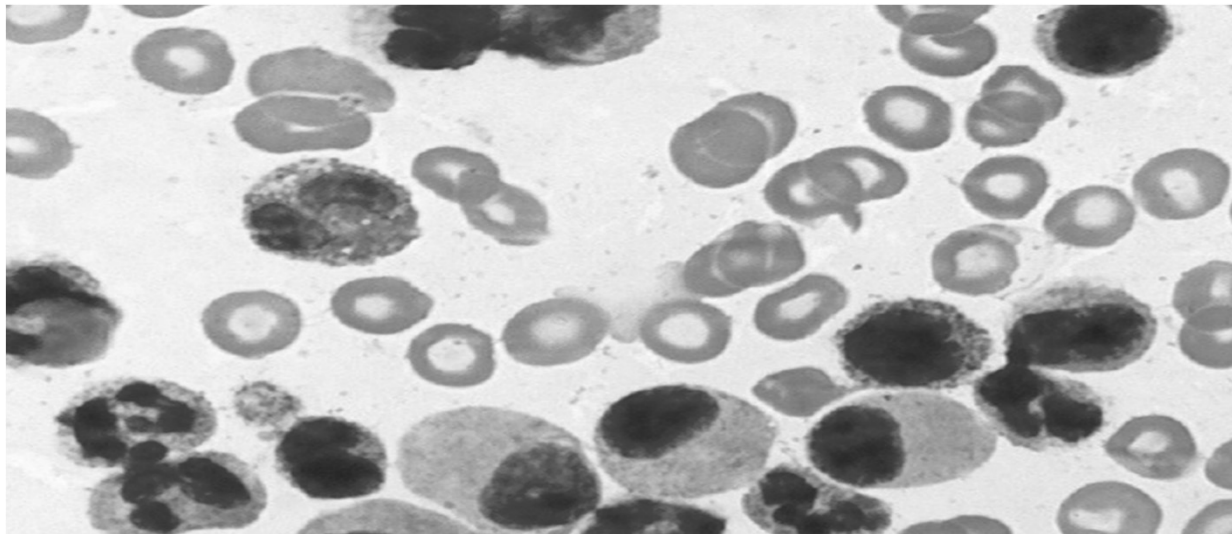
1 2

Search C50 Search

Code	Label
C500	Areola
C506	Axillary tail of breast
C500	Breast, areola
C506	Breast, axillary tail
C501	Breast, central portion
C508	Breast, inner
C508	Breast, lower
C503	Breast, lower-inner quadrant
C505	Breast, lower-outer quadrant
C508	Breast, midline
C500	Breast, nipple
C509	Breast, NOS (excludes Skin of breast C44.5)
C508	Breast, outer
C503	Breast, quadrant, lower-inner
C505	Breast, quadrant, lower-outer

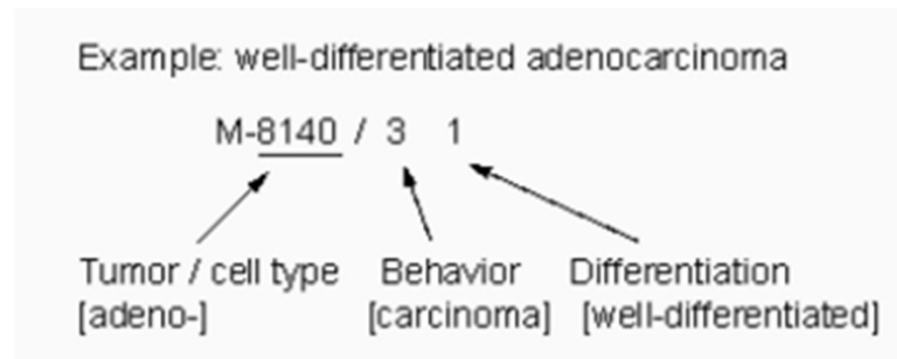
Morphology

- Morphology code records the type of cell that has become neoplastic and how it behaves



Structure of IDC-O-3 Morphology Codes

- Morphology, or histology, is the type of cancer
 - Morphology codes always begin with 'M'
 - The first four digits indicate the cell type
 - The fifth digit indicates the behavior code
 - The sixth digit is the grade of the tumor
- Web Plus collects these three characteristics in separate fields without the 'M' or dash



Morphology/Histology in Web Plus

Web Plus

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All data items marked with an asterisk (*) are required.

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CANCER INFORMATION

Date of Initial Diagnosis *

Age at Diagnosis

ICDO 2 Morph B/4 2001

ICDO 2 Behavior B/4 2001

ICDO 3 Morph After 2001 * 8140

ICDO 3 Beh After 2001 *

Primary Site

Grade Clinical

Grade Pathologic

Laterality

Final Diagnosis (Morph, Behavior, Grade)

Final Diagnosis (Primary Site, Laterality)

Lymphovascular Invasion

Diagnostic Confirmation

STAGE PROGNOSTIC FACTORS TEXT

Summary Stage Documentation *

Summary Stage Documentation - PE

Summary Stage Documentation - Xray/Scan

ICDO 3 Morph After 2001 - Google Chrome

registryplus.dshs.texas.gov/frnLookups.aspx?item=HistTypeICDO3&function=HISTOLOGY3(HIS...

Histology ICDO-3 codes

Search 8140 Search

Code	Label
8551	Acinar adenocarcinoma (C34.0) [FOR LUNG 2018+. FOR LUNG < 2018 USE 8550/3. USE 8140/3 FOR PROSTATE]
8140	Acinar adenocarcinoma (C61.9 ONLY) [DO NOT USE 8550/3 OR 8551/3 FOR PROSTATE] [2018+]
8550	Acinar adenocarcinoma [USE FOR LUNG < 2018 DX. FOR LUNG 2018+ USE 8551/3. EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]
8550	Acinar carcinoma [EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]
8550	Acinar cell carcinoma [EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]
8550	Acinar cell carcinoma [EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]
8550	Acinar cell adenocarcinoma [EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]
8140	Adenocarcinoma in situ, NOS
8551	Adenocarcinoma, acinar (C34.0) [FOR LUNG 2018+. FOR LUNG < 2018 USE 8550/3. USE 8140/3 FOR PROSTATE]
8140	Adenocarcinoma, acinar (C61.9 ONLY) [DO NOT USE 8550/3 OR 8551/3 FOR PROSTATE] [2018+]
8550	Adenocarcinoma, acinar [EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]
8550	Adenocarcinoma, acinar cell [EXCLUDES C61.9, USE 8140/3 FOR PROSTATE]

Important Terms

- NOS:
 - Not otherwise specified
 - Not elsewhere classified
 - Indicates a general term
- OBS:
 - Obsolete Term
 - More specific Terms & Codes preferred

Words to Watch Out For

- Cystic
- Multilocular - bubbly configuration
- Pleomorphic - abnormal size and shape of cells
- Encapsulated - confined within a capsule
- Metaplastic/metaplasia - changing from one cell type to another
- Exophytic - projecting into lumen
- Polypoid – polyp-shaped (but does not mean arising in a polyp)

Format of ICD-O Terms in Numerical List

C07.9	Parotid gland	<i>Pref.</i>
	Parotid, NOS	<i>Syn.</i>
	Stensen duct	<i>Equiv.</i>
	Parotid gland duct	<i>Equiv.</i>
M-8290/3	Oxyphilic adenocarcinoma	<i>Pref.</i>
	Oncocytic carcinoma	<i>Syn.</i>
	Onococytic adenocarcinoma	<i>Syn.</i>
	Hurthle cell carcinoma (C73.9)	<i>Equiv.</i>
	Follicular carcinoma, oxyphilic cell (C73.9)	<i>Equiv.</i>

Coding Guidelines

Summary of the rules for using ICD-O 3:

- Rules range from A thru K
- Rules A-E relate to Topography
- Rules F-K are for Morphology

Rule A: Topographic Regional & Ill-Defined Sites

If the diagnosis does not specify the tissue of origin, code the appropriate tissues suggested in the alphabetic index for each ill-defined site in preference to the "NOS" category.

Example: The diagnosis was squamous cell carcinoma of the arm

Resolution: Code to C44.6 Arm, NOS
(carcinoma, melanoma, nevus)

Rule B: Prefixes

If a topographic site is modified by a prefix such as peri-, para- or the like, and is not specifically listed in ICD-O-3, code to the appropriate ill-defined subcategory C76 (ill-defined site). If the type of tumor indicates origin from a particular tissue, code accordingly.

Common prefixes include

- Peri = around
- Para = alongside
- Pre = before
- Supra = above
- Infra = below

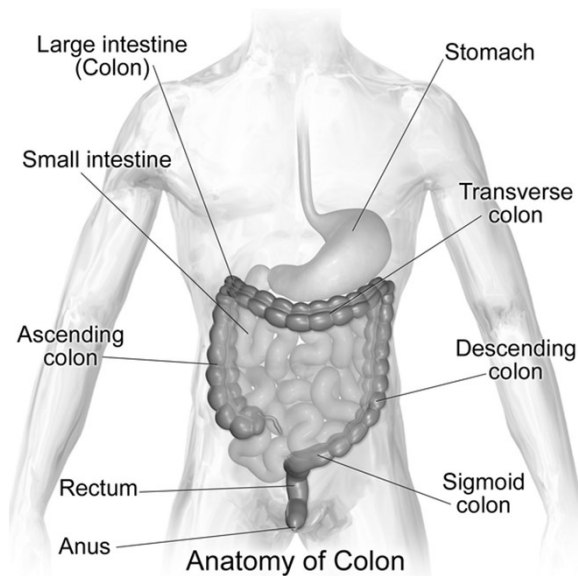
Example: Report uses the term perirenal.

Resolution: This means around the kidney, so use code C480.

Rule C: Overlapping Sites

Use subcategory "C_ .8" when a tumor overlaps the boundaries of two or more categories or subcategories and its point of origin cannot be determined.

The site must be contiguous, and the histology must be the same



Example: The record states a 5 cm tumor involves the descending and sigmoid colon indicating adenocarcinoma. Where did this tumor start?

Rules D and E: Lymphomas and Leukemias

- The coding guidelines for these diseases are very detailed and covered in a separate module.
- Make sure to refer to the Hematopoietic and Lymphoid Neoplasm Coding Manual for leukemias:
<http://seer.cancer.gov/seertools/hemelymph>

Review: Topography

Structure of Topography Code

C___.__

site subsite

Example: C72.3 optic nerve

C72 stands for spinal cord, cranial nerves, and other parts of the CNS

C72._ indicates the specific subsite of the above

Rule F: Behavior Code

Use the appropriate 5th digit behavior code even if the exact term is not listed in ICD-O

0 = Benign

1 = Uncertain whether benign or malignant
(borderline)

2 = Carcinoma in situ

3 = Malignant

Do Not use:

6 = Malignant, metastatic site

9 = Malignant, uncertain whether primary or
metastatic site

Behavior Code in Web Plus

ICDO 3 Morph After 2001 * ?

ICDO 3 Beh After 2001 * ?

Primary Site

Grade Clinical

Grade Pathologic

Laterality

Final Diagnosis (Morph, Behavior, Grade)

Final Diagnosis (Primary Site, Laterality)

Lymphovascular Invasion

Diagnostic Confirmation

Behavior Code ICD-O-3 X

- 0 Benign
- 1 Uncertain whether benign or malignant
- 2 Carcinoma in situ
- 3 Malignant, primary site

STAGE PROGNOSTIC FACTORS TEXT

Summary Stage Documentation * ?

Rule G: Assign Highest Grade

Assign the highest grade or differentiation code described in the diagnostic statement.

Rule G has been superseded by the 2018 Grade Manual for cases dx 2018 and forward!

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
9	Grade cannot be assessed (GX); Unknown

Rule H: Site-Associated Morphology Terms

Use the topography code provided in the ICD-O-3 book when a topographic site is not stated in the diagnosis. This topography code should be disregarded if the tumor is known to arise at another site

Morphology	Term	ICD-O Topography (usual primary site)	Other primary sites
M-9510/3	Retinoblastoma	C69.2 Retina	---
M-8170/3	Hepatocellular carcinoma	C22.0 Liver	---
M-8090/3	Basal cell carcinoma	C44._ Skin	C51._ Vulva
			C60._ Penis
			C63.2 Scrotum
			C61.9 Prostate
M-9530/0	Meningioma	C70._ Meninges	---
M-938—M-948	Gliomas	C71._ Brain	C72.0 Spinal cord

Rule J: Compound Morphology Diagnosis

Change the order of root words in a compound term if the term is not listed in ICD-O

Example: Myxo/fibro/sarcoma is not listed in ICD-O coding manual, but Fibro/myxo/sarcoma is listed as = M8811/3

Rule K: Coding Multiple Morphology Terms

When no single code includes all diagnostic terms, use the numerically higher code number if the diagnosis of a single tumor includes two modifying adjectives with different code numbers.

However, Rule K is superseded by 2018 Solid Tumor Rules for cases dx 2018 and forward!

Review: Morphology

Structure of Morphology Code

M _ _ _ / _ _
Histology behavior grade

Example: hepatocellular carcinoma, NOS
Poorly diff.

M-8170/3 3

8170 is the histology code (in this case, hepatocellular carcinoma)

3 is the behavior code (in this case, malignant)

3 is the grade code (in this case, poorly differentiated)

The M and the dash (-) are not coded
in the Web Plus data fields.

ICD-O-3 Update Guidelines

Histology Coding Sources:

1. 2018 Solid Tumor Rules
2. Updated ICD-O histology codes and terms
<https://seer.cancer.gov/icd-o-3/>
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Summary

You should now be able to discuss:

- Sections of ICD-O-3 Book
- Meaning of NOS/OBS
- Format of Numerical & Alphabetic Index
- Rules
- Morphology
- Topography
- Resources

Thank you
